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10/799,480	03/11/2004	Andrew Rybakowski	UGS-001	8359
26137 7590 04/26/2007 PATENT DEPARTMENT			EXAMINER	
SKADDEN, ARPS, SLATE, MEAGHER & FLOM LLP FOUR TIMES SQUARE NEW YORK, NY 10036			JOSEPH, TONYA S	
			ART UNIT	PAPER NUMBER
			3628	
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
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Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	<u></u>	Application No.	Applicant(a)				
Office Astion Commence		Аррисацон но.	Applicant(s)				
		10/799,480	RYBAKOWSKI ET AL.				
	Office Action Summary	Examiner	Art Unit				
		Tonya Joseph	3628				
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status			•				
1)∐ R	esponsive to communication(s) filed on						
• —	This action is FINAL . 2b)⊠ This action is non-final.						
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposition	of Claims						
4)⊠ Ci	laim(s) <u>1-28</u> is/are pending in the application.						
	4a) Of the above claim(s) is/are withdrawn from consideration.						
·	5) Claim(s) is/are allowed.						
	☐ Claim(s) 1-28 is/are rejected.						
•	7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers							
9) The specification is objected to by the Examiner.							
10) ☐ The drawing(s) filed on 11 March 2004 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority und	der 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:							
1. Certified copies of the priority documents have been received.							
2. Certified copies of the priority documents have been received in Application No.							
3. Copies of the certified copies of the priority documents have been received in this National Stage							
application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.							
oce the attached detailed office action for a list of the certified copies not received.							
Attachment(s)							
1) Notice o	of References Cited (PTO-892)	4) Interview Summary					
3) Informati	of Draftsperson's Patent Drawing Review (PTO-948) tion Disclosure Statement(s) (PTO/SB/08) to(s)/Mail Date	Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:					

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DETAILED ACTION

Claim Rejections - 35 USC § 112

- The following is a quotation of the second paragraph of 35 U.S.C. 112:
 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 2. Claims 1-28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- 3. The term " affecting utility consumption " and "affect utility consumption" in claims 1 and 13 respectively are relative terms which render the claims indefinite. The terms are not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. It is unclear at point utility consumption is actually considered affected. For Examination purposes Examiner is interpreting affecting to be any steps taken subsequent to receiving information regarding a cumulative total cost.
- 4. The term "a common reference clock" in claim 3 is a relative term which renders the claim indefinite. The term "common" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. For Examination purposes Examiner is interpreting a common reference clock to be any device that has the ability to synchronize time.

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- 5. Claim 3 recites the limitation, "ensuring that the time interval for the utility price directly corresponds" in line 5; however, it is unclear what device is "ensuring" the recited step. It is further unclear at what point the particular device has completed the step of ensuring. For Examination purposes Examiner is interpreting the step of ensuring to be performed by any clock, and the step having been completed when a check is done by the clock to determine the corresponding time.
- 6. Claim 15 recites the limitation "the clocks" in line 1. There is insufficient antecedent basis for this limitation in the claim.
- 7. Claims 11-12 and 24-28 recite the limitation "the parameters" in line 1. There is insufficient antecedent basis for this limitation in the claim.
- 8. Claims 2-12 and 14-23 contain the same deficiencies through dependency and as such, are rejected for the same reasons.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

- 9. Claims 1-28 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.
- 10. Claim 1 is rejected under 35 U.S.C. 101 because it fails to provide a tangible result. Claim 1 recites the limitation, "calculating a cumulative total of the utility cost based on costs calculated for each of said plurality of intervals". The absence of an output of the cumulative total would not yield a tangible result. 35 U.S.C. 101 requires the claimed invention as a whole must produce a "useful, concrete and tangible result."

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As the claim is currently presented, there is no tangible result subsequent to the step of calculating a cumulative total of the utility cost based on costs calculated for each of said plurality of intervals, due to this lack of information, this would constitute non-statutory material.

- 11. Claims 1, 13 and 14 recite limitations regarding the affects of utility consumption of the entity. The point at which utility consumption is actually considered affected and the subjective nature of this determination would not always produce a substantially reproducible result. 35 U.S.C. 101 requires the claimed invention as a whole must produce a "useful, concrete and tangible result." As the claim is currently presented, the step of affecting and the subjective determination required to execute the step does not yield a concrete result, as such, this would constitute non-statutory material.
- 12. Claims 2-12 and 13-28 contain the same deficiencies as claims 1 and 13 through dependency and as such, are rejected for the same reasons

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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13. Claims 1-12, 14 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liebl et al; U.S. Patent No. 5,289,362 in further in view of Crichlow U.S. Pre-Grant Publication No. 2002/0018545 A1 in further view of Official Notice.

As per Claim 1, Liebl teaches, (a) measuring utility usage of the entity during 14. a time interval (see Col. 9 lines 26-28 and 42-51); (b) obtaining unit utility price for said entity, the pricing information established during said time interval (see Col. 9 lines 28-32 and Col. 4 lines 44-60); (e) calculating a cumulative total of the utility cost based on costs calculated for each of said plurality of intervals (see Col. 17 lines 21-26); Liebl further teaches affecting utility consumption of the entity (see Col. 4 lines 61-68 and Col. 5 line 1) Liebl further teaches (c) establishing a utility cost for said time interval (see Col. 17 lines 21-39) Liebl does not explicitly teach establishing utility cost where the cost is the product of said unit utility price and said utility usage. Crichlow teaches, the computer program allocates the use of power within the limits of equipment operations such that the optimal power multiplied by the price is used. (see para. 105 lines 7-10; para. 108 and para. 113). It would have been prima facie obvious to one of ordinary skill in the art at the time of invention to modify the teachings of Liebl to include the teachings of Crichlow in order to formulate an optimization model which minimizes total power cost within the constraint of the customer. Neither Crichlow nor Liebl explicitly teach (d) repeating steps a-c for a plurality of time intervals. Official Notice is taken that repeating steps a-c for a plurality of time intervals is old and well known in the art of utility measurement. It would have-been prima facie obvious to one of ordinary skill in the art at the time of invention

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to modify the teachings of Liebl and Crichlow to include the teachings of Official Notice in order to provide an accurate account of total monthly usage.

- 15. As per Claim 2, Liebl in view of Crichlow in further view of Official Notice teach the method of claim 1 as described above. Liebl further teaches, wherein said cumulative total affecting the utility consumption is based on the cost in one or more time intervals (see Col. 4 lines 50-3 and Col. 5 line 1).
- 16. As per Claim 3, Liebl in view of Crichlow in further view of Official Notice teach the method of claim 1 as described above. Liebl further teaches, synchronizing, with a common reference clock, the clock that provides timing for the measurement of utility usage during a specific time interval (see Col. 26 lines 55-68) and the collection of utility price data for the same time interval (see Col. 3 lines 43-45; 52-53 and 56-64); the limitation "ensuring that the time interval for the utility price directly corresponds, in time and duration, to the time interval for the measured utility usage" is merely a statement of intended result and is only afforded patentable weight in as much as it distinguishes the natural result of the synchronizing step. Because the result, of the synchronizing step taught by Liebl is capable of reaching this result, it meets the limitations of the claim.
- 17. As per Claim 4, Liebl in view of Crichlow in further view of Official Notice teach the method of claim 1 as described above. Liebl further teaches, verifying the utility usage is from a known measuring device (see Col. 9 lines 24-32, Examiner is interpreting the meter as a known device).
- 18. As per Claim 5, Liebl in view of Crichlow in further view of Official Notice teach the method of claim 3 as described above. Liebl further teaches, verifying the utility

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usage is free of communication errors (see Col. 10 lines 1-4; Col. 70 lines 19-44; Col. 71 lines 29-55 and Col. 72 lines 39-52).

- 19. As per Claim 6, Liebl in view of Crichlow in further view of Official Notice teach the method of claim 1 as described above. Liebl further teaches, automatically adjusting the utility consumption if the running total or cost for a specific time interval reaches a threshold cost value (see Col. 2 lines 33-48).
- 20. As per Claim 7, Liebl in view of Crichlow in further view of Official Notice teach the method of claim 1 as described above. Liebl does not explicitly teach automatically alerting an operator of the entity if the running total or cost in a specific time interval reaches a threshold cost value. Official Notice is taken that alerting an operator of if the running total or cost in a specific time interval reaches a threshold cost value is old and well known in the art of energy monitoring systems. It would have been prima facie obvious to one of ordinary skill in the art at the time of invention to modify the teachings of Liebl; Crichlow and Official Notice to include alerting an operator of the entity if the running total or cost in a specific time interval reaches a threshold cost value in order to allow an operator to restore acceptable system settings.
- 21. As per Claim 8, Liebl in view of Crichlow in further view of Official Notice teach the method of claim 1 as described above. Liebl further teaches, wherein the time interval for measuring utility usage is less than, equal to, or greater than five minutes (see Col. 9 liens 48-51).

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- 22. As per Claim 9, Liebl in view of Crichlow in further view of Official Notice teach the method of claim 1 as described above. Liebl further teaches, wherein the time interval for measuring the utility price is less than, equal to, or greater than five minutes (see Col. 9 lines 38-51).
- 23. As per Claim 10, Liebl in view of Crichlow in further view of Official Notice teach the method of claim 1 as described above. Liebl further teaches, providing an interface for an operator of the entity to define parameters that affect the managing of the utility usage and cost (see Col. 14 lines 33-68).
- 24. As per Claim 11, Liebl in view of Crichlow in further view of Official Notice teach the method of claim 1 as described above. Liebl further teaches, wherein the parameters include the frequency of measuring the utility usage and establishing the running cost (see Col. 9 lines 48-51 and Col. 17 lines 21-39).
- 25. As per Claim 12, Liebl in view of Crichlow in further view of Official Notice teach the method of claim 9 as described above. The limitation wherein the parameters include threshold load, electricity price, power factor, temperature, time period is only found to be non-functional descriptive material and are not functionally involved in any of the dependent steps recited. Thus, this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, see *In re Gulack*, 703 F. 2d 1381, 1385, 217 USPQ 401, 404, (Fed. Cir. 1983); *In re Lowry*, 32 F. 3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994). Therefore, it would have been prima facie obvious to one of ordinary skill in the art at the time of invention to use any type of parameters for utility use determination.

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- 26. As per Claim 14, Liebl in view of Crichlow teaches the system of claim 13 as described above. Liebl does not explicitly teach, wherein the server affects utility consumption of the entity based on cost in a particular time interval. Official Notice is taken that a server affecting utility consumption of the entity based on cost in a particular time interval is old and well known in the art of account management. It would have been prima facie obvious to one of ordinary skill in the art at the time of invention to modify the systems of Liebl and Crichlow in order to stay within the limits of a customer threshold value.
- 27. As per Claim 20, Liebl in view of Crichlow teaches the system of claim 13 as described above. Liebl does not explicitly teach wherein the server automatically alerts an operator of the entity if the running total reaches a threshold cost value or if the utility cost in a time interval reaches a threshold cost value. Official Notice is taken that using a server to alert an operator of if the running total reaches a threshold cost value is old and well known in the art of energy monitoring systems. It would have been prima facie obvious to one of ordinary skill in the art at the time of invention to modify the teachings of Liebl; Crichlow and Official Notice to include alerting an operator of the entity if the running total or cost in a specific time interval reaches a threshold cost value in order to allow an operator to restore acceptable system settings.
- 28. Claims 13, 15-16, 21-22, 24 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liebl et al; U.S. Patent No. 5,289,362 in further in view of Crichlow U.S. Pre-Grant Publication No. 2002/0018545.

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29. As per Claim 13, Liebl teaches a system which, obtains unit utility pricing information which the independent market operator establishes for defined time intervals (see Col. 9 lines 28-32 and Col. 4 lines 44-60); correlates each time interval for the utility usage data with a corresponding time intervals for the utility price data (see Col. 4 lines 53-60); establishes a utility cost for each time interval based on the utility usage measured during the interval and the utility price during the same interval (see Col. 17 lines 21-39 and Col. 4 lines 53-60); establishes a running total of the utility cost based on the utility cost measured over a defined number of time intervals (see Col. 17 lines 21-26); and

affects utility consumption of the entity based on the running total (see Col. 4 lines 61-68 and Col. 5 line 1). Liebl does not explicitly teach these operations being performed by a server, coupled to the plurality of the meter profilers via a communication device and coupled to an independent market operator. Crichlow teaches, when the meter is offline or power is out there is a special outage signal code from the PC device sent over the computer modem to the main server. The system for reading a meter 30 of the present invention is illustrated in FIG. 2. This figure illustrates the flow of data from a meter reading module 32 which reads data from a meter 34 to servers 48 of the energy company 36 while FIG. 4 illustrates the flow of data from the meter reading device 32 reading data from meters 34 to the servers 48 as well as the flow from the servers 48 back to a personal computer 40 of the user (see para. 36 lines 5-7; para. 93 lines 1-7 and Figs. 2 and 4). Liebl does not explicitly teach a plurality of meter profilers which obtain utility usage of the entity measured during a defined time interval Crichlow further

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teaches FIG. 5 illustrates the use of the system for reading a meter 30 of the present invention for use in collecting data from a plurality of meters 34 within a large building having numerous residences. In this instance the meters 34 are connected to a gang box 64 wherein each meter 34 provides data to the PC 40 via a connection line 38. The gang box 64 includes a plurality of meter reading devices 32, each connecting to a respective meter 34. The computer is able to differentiate data from each meter reading module 32 within the gang box 64 and thus also differentiate data from each meter 34. This data is transmitted to the servers of the energy company 36 upon demand (see para. 97 lines 1-11 and para. 115). It would have been prima facie obvious to one of ordinary skill in the art at the time of invention to modify the system of Liebl to include the system of Crichlow in order to provide energy companies with usage data and to permit the collection of usage data from building containing multiple residences, as taught in Crichlow para. 93 lines 1-8 and para. 97 lines 1-4).

- 30. As per Claim 15, Liebl in view of Crichlow teaches the system of claim 13 as described above. Liebl further teaches wherein the server further synchronizes the clocks in the plurality of the meter profilers with a clock signal. The limitation "common reference (e.g., national standard)" is considered non-functional descriptive material and as such is afforded little patentable weight (see Col. 26 lines 55-68; Col. 3 lines 43-45 and 52-53).
- 31. As per Claim 16, Liebl in view of Crichlow teaches the system of claim 15 as described above. Liebl further teaches wherein the time interval for the utility usage is

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coincident with the time interval for the utility price (see Col. 9 lines 28-32 and Col. 4 lines 44-60).

- 32. As per Claim 21, Liebl in view of Crichlow teaches the system of claim 13 as described above. Liebl further teaches, wherein the time interval for measuring utility usage is less than, equal to, or greater than five minutes (see Col. 9 lines 48-51).
- 33. As per Claim 22, Liebl in view of Crichlow teaches the system of claim 13 as described above. Liebl further teaches, wherein the time interval for measuring the utility price is less than, equal to, or greater than five minutes (see Col. 9 lines 38-51).
- 34. As per Claim 24, Liebl in view of Crichlow teaches the system of claim 22 as described above. Liebl further teaches, wherein the parameters include the frequency for the plurality of the meter profilers to obtain the utility usage (see Col. 9 lines 26-28 and 48-51).
- 35. As per Claim 28, Liebl in view of Crichlow teaches the system of claim 24 as described above. Liebl further teaches, wherein the parameters include a threshold cost value (see Col. 4 lines 54-60).
- 36. Claims 17-19, 23 and 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liebl et al; U.S. Patent No. 5,289,362 in further in view of Crichlow U.S. Pre-Grant Publication No. 2002/0018545 A1 in further view of Hosting (Reference U of the attached PTO-892).
- 37. As per Claim 17, Liebl in view of Crichlow teaches the system of claim 15 as described above. Liebl further teaches a system which verifies that the utility usage is from the plurality of the meter profilers (see Col. 9 lines 24-32). Liebl does not explicitly

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teach the use of a server. Hosting teaches, the connection between client and server is normally by means of message passing, often over a network, and uses some protocol to encode the client's requests and the server's response (see para. 1). It would have been prima facie obvious to one of ordinary skill in the art at the time of invention to modify the system of Liebl to include the use of a server in order to allow for the passing of requests over a network, as taught in Hosting para. 1 lines 1-4.

- 38. As per Claim 18, Liebl in view of Crichlow in further view of Hosting teaches the system of claim 17 as described above. Liebl further teaches a system which, verifies that the utility usage is free of communication errors (see Col. 10 lines 1-4; Col. 70 lines 19-44; Col. 71 lines 29-55 and Col. 72 lines 39-52). Liebl does not explicitly teach the use of a server. Hosting teaches, the connection between client and server is normally by means of message passing, often over a network, and uses some protocol to encode the client's requests and the server's response (see para. 1). It would have been prima facie obvious to one of ordinary skill in the art at the time of invention to modify the system of Liebl to include the use of a server in order to allow for the passing of requests over a network, as taught in Hosting para. 1 lines 1-4.
- 39. As per Claim 19, Liebl in view of Crichlow teaches the system of claim 13 as described above. Liebl further teaches a system which, automatically adjusts the utility consumption if the running total reaches a threshold cost value or if the utility cost in a time interval reaches a threshold cost value (see Col. 2 lines 33-48). Liebl does not explicitly teach the use of a server. Hosting teaches, the connection between client and server is normally by means of message passing, often over a network, and uses some

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protocol to encode the client's requests and the server's response (see para. 1). It would have been prima facie obvious to one of ordinary skill in the art at the time of invention to modify the system of Liebl to include the use of a server in order to allow for the passing of requests over a network, as taught in Hosting para. 1 lines 1-4.

- 40. As per Claim 23, Liebl in view of Crichlow teaches the system of claim 13 as described above. Liebl further teaches a system which, provides an interface for an operator of the entity to define parameters for the system to manage the utility cost (see Col. 14 lines 33-68). Liebl does not explicitly teach the use of a client server coupled to a server. Hosting teaches, the connection between client and server is normally by means of message passing, often over a network, and uses some protocol to encode the client's requests and the server's response (see para. 1). It would have been prima facie obvious to one of ordinary skill in the art at the time of invention to modify the system of Liebl to include the use of a server in order to allow for a computer to provide a service for another computer connected via a network, as taught in Hosting para. 2 lines 1-2.
- 41. As per Claim 25, Liebl in view of Crichlow teaches the system of claim 24 as described above. Liebl further teaches, the frequency to obtain the utility unit price information (see Col. 9 lines 28-32 and Col. 4 lines 44-60). Liebl does not explicitly teach the use of a server. Hosting teaches, the connection between client and server is normally by means of message passing, often over a network, and uses some protocol to encode the client's requests and the server's response (see para. 1). It would have been prima facie obvious to one of ordinary skill in the art at the time of invention to

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modify the system of Liebl to include the use of a server in order to allow for a computer to provide a service for another computer connected via a network, as taught in Hosting para. 2 lines 1-2.

- 42. As per Claim 26, Liebl in view of Crichlow teaches the system of claim 24 as described above. Liebl further teaches the frequency to establish the running total (see Col. 17 lines 21-26) Liebl does not explicitly teach the use of a server. Hosting teaches, the connection between client and server is normally by means of message passing, often over a network, and uses some protocol to encode the client's requests and the server's response (see para. 1). It would have been prima facie obvious to one of ordinary skill in the art at the time of invention to modify the system of Liebl to include the use of a server in order to allow for a computer to provide a service for another computer connected via a network, as taught in Hosting para. 2 lines 1-2.
- 43. As per Claim 27, Liebl in view of Crichlow teaches the system of claim 24 as described above. Liebl further teaches the frequency to establish the cost for each interval (see Col. 2 lines 49-53). Liebl does not explicitly teach the use of a server. Hosting teaches, the connection between client and server is normally by means of message passing, often over a network, and uses some protocol to encode the client's requests and the server's response (see para. 1). It would have been prima facie obvious to one of ordinary skill in the art at the time of invention to modify the system of Liebl to include the use of a server in order to allow for a computer to provide a service for another computer connected via a network, as taught in Hosting para. 2 lines 1-2.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tonya Joseph whose telephone number is 571-270-1361. The examiner can normally be reached on Mon-Fri 7:30am-5:00pm First Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Hayes can be reached on 571 272 0847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tonya Joseph Examiner

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JOHN W. HAYES